INTRODUCTION

This section of the report is intended to provide Management with an executive-level summary of the most noteworthy performance information to date. Unless otherwise noted, all information is as of the end of November 2002.

Included in this section are descriptions of significant accomplishments considered to have made the greatest contribution toward safe, timely and cost-effective clean up; an overall fiscal year-to-date summary analysis addressing cost, schedule, and milestone performance; a contract-to-date performance table; overviews of safety, breakthroughs, opportunities for improvement (that represent potential significant improvements over the established baseline), critical issues that identify the high-level challenges to achieving cleanup progress, EM Corporate Performance Measures and a forward-looking synopsis of Upcoming Planned Key Events.

SIGNIFICANT ACCOMPLISHMENTS

324 Building Spent Nuclear Fuel (SNF) Project — The 324 Building staff shipped the final container of Spent Nuclear Fuel (SNF) to the 200 Area Interim Storage Area (ISA) completing the removal of all SNF that had been stored in the 324 Building and moving about 650,000 curies of radioactivity away from the City of Richland and the Columbia River.

Spent Nuclear Fuel Production Improvements — The project continues to realize substantial productivity improvements as a result of improving equipment reliability, processing times and process management. Efforts continue to focus on the 13 Plant Improvement Initiatives; three of those initiatives were implemented as of November 30, 2002.

Spent Nuclear Fuel Movement Activities — During the reporting period, the project shipped 17 Multi-Canister Overpacks (MCOs) containing 119.07 Metric Tons of Heavy Metal (MTHM) from K West (KW) to the Cold Vacuum Drying Facility (CVDF). Cumulatively, a total of 155 MCOs containing 835.31 MTHM have been shipped.

Fuel Transfer System (FTS) – The project commenced FTS Operations on November 25, 2002, five days ahead of schedule. During November, the project successfully completed shipping all three of the scheduled canister shipments. The first MCO (MCO 162) containing K East (KE) fuel is scheduled for shipment on December 11, 2002.

MCO Basket Fabrication Shop — The SNF Project MCO Basket Fabrication Shop successfully completed fabrication of all 2,209 MCO baskets. All baskets were completed on schedule and met Quality Assurance requirements.

PUREX/B Plant Roof Completion — The 200 Area Facilities Disposition Project (AFD) completed milestone TRP-38-803, "Complete installation of new roofs at PUREX and B Plant" two weeks ahead of schedule.

Plutonium Finishing Plant (PFP) Processing/Support — During the reporting period, of the approximately 133,000 grams of Sand, Slag and Crucible (SS&C) planned, 170,041 grams were packaged into 41 Pipe Over pack Containers (POCs). Processing of SS&C continues to exceed the baseline schedule. During November two SS&C POCs containing 30 drums were received at the Central Waste Complex. The final SS&C shipments are scheduled for early January 2003, with the oxide/mixed oxide stream beginning immediately afterwards.

Stabilization of Nuclear Material — A total of 244 Bagless Transfer Containers (BTCs) have been processed under the 2736-ZB work scope as of November 24, 2002, with 26 BTCs processed in November. Stabilization of plutonium (Pu) Oxide material, which began in early August, reached 549 items through November, with 195 items processed in November. Thermal stabilization of the remaining alloys completed on November 25, 2002.

PERFORMANCE DATA AND ANALYSIS

The following provides a brief synopsis of overall PHMC Environmental Management (EM) funds management and milestone performance. Schedule and cost performance is not available for November.

FUNDS MANAGEMENT
FUNDS VS. ACTUAL COSTS ($000)

This chart reflects the FH Project structure. This breakout is necessary to provide FH project managers with information specific to their areas of responsibility and accountability and to facilitate effective management of the funds within their control (obligated to the PHMC).

Project	PBS	Total Funding	November FYTD Actual Cost	Project Completion	Post 2006	Other
Spent Nuclear Fuel	RS03	$54,675	$33,775	$20,900		
Plutonium Finishing Plant	CP03	$27,363	$15,087	$12,276		
	CP03	$64	$0			$64
	Subtotal PFP	$27,427	$15,087	$12,276		$64
Central Plateau Remediation	RC06	$7,531	$4,550	$2,981		
	RC02	$0	$0		$0	
	RC01	$630	$0		$630	
	CP01	$7,749	$5,448		$2,301	
	RS01	$13	$1		$12	
	SS03	$4,120	$2,610		$1,510	
	SS04	$1,005	$446		$559	
	Subtotal CP	$21,048	$13,055	$2,981	$5,012	
Waste Management	CP02	$23,052	$14,896	$8,156		
	RC02	$143	$0		$143	
	RC05	$80	$0		$80	
	Subtotal WM	$23,275	$14,896	$8,156	$223	
Advanced Reactor	RC03	$1,483	$201			$1,282
Landlord & Site Services	SS02	$19,699	$10,217	$9,482		
HAMMER	SS05	$1,031	$0		$1,031	
Site Systems & Analysis	SS01	$5,521	$3,442		$2,079	
Near Term Stewardship	SC01	$551	$308		$243	
TOTAL EXPENSE		**$154,710**	**$90,981**	**$53,795**	**$8,588**	**$1,346**

Operating costs for HAMMER were moved to SS01 per RL direction. GPP funds for HAMMER (EVOC) to be moved to SS01 once Funds recast is completed by RL.

MILESTONE PERFORMANCE

Milestones represent significant events in project execution. They are established to provide high level visibility to critical deliverables and specific status on the accomplishment of these key events. Because of the relative importance of milestones, the ability to track and assess milestone performance provides an effective tool for managing the PHMC EM cleanup mission. These milestones are consistent with the FH contract.

FY milestone performance (Enforceable Agreement [EA], U.S. Department of Energy-Headquarters [DOE-HQ], and RL) shows that one milestone was completed on or ahead of schedule and two milestones are overdue.

FY 2003 milestone performance information is depicted graphically on the following page. For additional details related to the data, prior year milestones, and outyear milestones, refer to the relevant project section titled "Milestone Achievement."

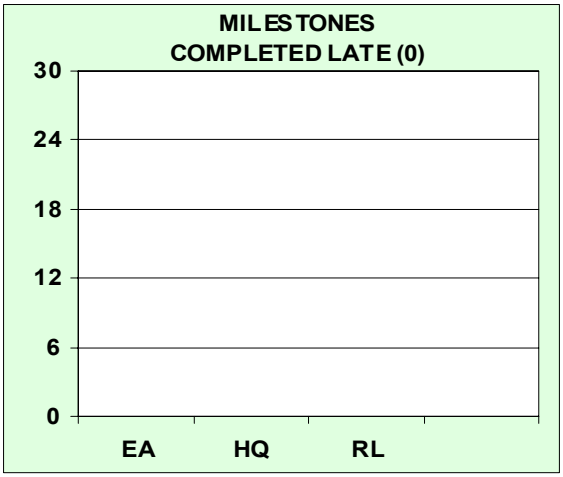
FY 2003 milestone information is based upon the September 30, 2002 baseline as updated for RL approved changes. Changes in both the number and type of milestones from month to month are the result of Baseline Change Requests (BCRs) approved during the year.

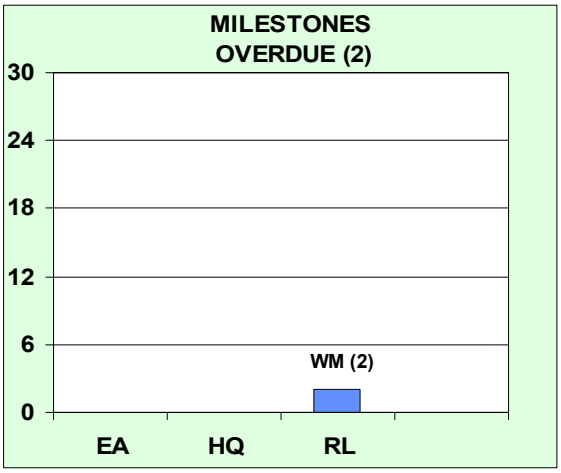
TOTAL ALL HANFORD PROJECTS
MILESTONE ACHIEVEMENT
FH Contract Milestones

MILESTONE TYPE	FISCAL YEAR-TO-DATE				REMAINING SCHEDULED			Total FY 2003
	Completed Early	Completed On Schedule	Completed Late	Overdue	Forecast Early	Forecast On Schedule	Forecast Late	
Enforceable Agreement	0	0	0	0	0	12	3	15
DOE-HQ	1	0	0	0	0	0	0	1
RL	1	0	0	2	2	1	0	6
Total Project	2	0	0	2	2	13	3	22

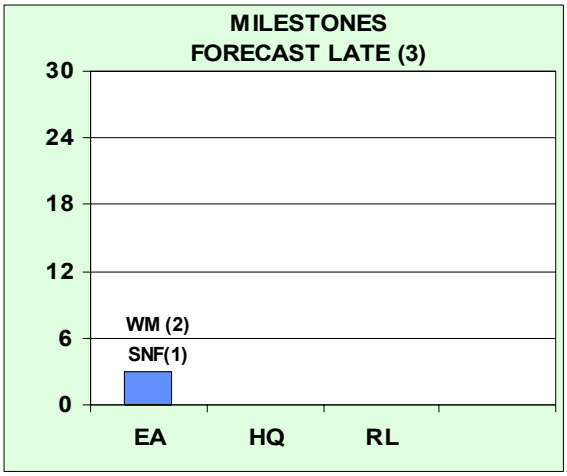
TOTAL ALL HANFORD PROJECTS
MILESTONE EXCEPTIONS

FISCAL YEAR TO DATE





REMAINING SCHEDULED



SAFETY OVERVIEW

The focus of this section is to document trends in occurrences. Improvements in these rates are due to the efforts of the PHMC workforce as they implement the Integrated ES&H Management System (ISMS), work towards achieving Voluntary Protection Program (VPP) "star" status, and accomplish work through Enhanced Work Planning (EWP). Safety and health statistical data is presented in this section. The safety charts are reported according to OSHA standards.

Significant Safety and Health Events

PHMC Level

Occupational Safety & Health Administration (OSHA) Recordable Case Rate: The PHMC OSHA Recordable Rate continued improvement further below the 1.5 baseline average in November. Increased focus on workplace safety and project safety improvement plans is ongoing. The PHMC OSHA Recordable Case Rate for the month of November was 0.63, the best reported rate in two years.

Days Away From Work (DAFW) Case Rate: The current safe work hour count for the PHMC Team is 5.2 million hours. The current DAFW Rate for November is zero.

DOE Safety Cost Index: The current baseline was adjusted due to growth in the number of days on cases within the baseline. The current baseline is 4.7 cents per hour, less than the DOE CY 2001 rate of 9.7. Overall the severity of the injuries being experienced on the projects is low.

Subproject Level

The **Plutonium Finishing Plant (PFP)** subproject achieved 1,054,886 safe work hours in November. The DOE Safety Cost Index is stable at the current baseline of 8.3 cents per hour, slightly above the 8.0 goal. There is a significant improvement in the OSHA Recordable Case Rate, with the past four months at zero, which is four months at one standard deviation below average.

The **300 Area Facility Transition** (WBS 3.1.6) subproject (formerly called the River Corridor Project) has exceeded 817,000 safe work hours. The OSHA Recordable Case Rate remains stable at the current baseline average of 1.9 cases per 200,000 hours worked. The DOE Safety Cost Index has shown a significant improvement, with seven months below average.

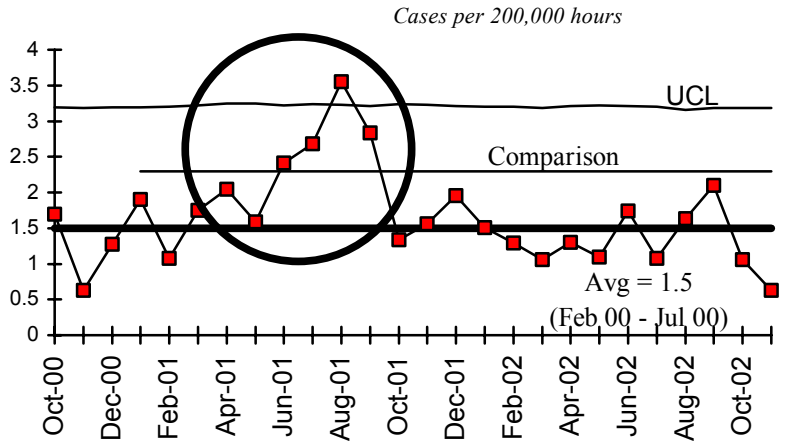
The **Spent Nuclear Fuel (SNF) Project** reached 908,843 safe hours. Management, safety and the employees are placing increased focus in workplace safety and actions to improve safety performance. The primary area of focused injury reduction is sprains and strains in the KW operations.

The **200 Area Materials and Waste Management** (WBS 3.3.2) subproject (formerly called the Waste Management Project) exceeded 4.4 million safe work hours in November. The current OSHA Recordable Case Rate is at the Fluor Corporate Goal of 0.9. The DOE Safety Cost Index remains stable at a good level.

Due to space constraints, FY 1996 through FY 1999 data is not portrayed on the following graphs.

Total OSHA Recordable Case Rate

Green



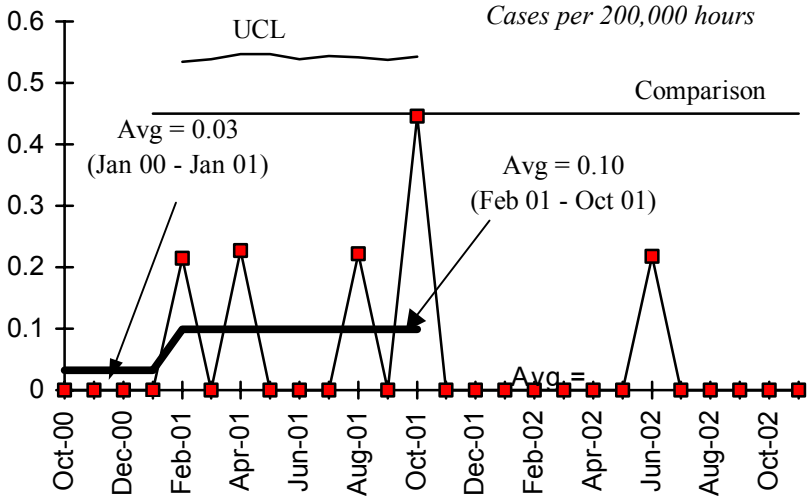
FY 2002 = 1.5
FY 2003 = 0.8
DOE Complex Comparison Average = 2.3 (CY01)

FH Projects were demonstrating a reduction of Recordable injuries through most of the Fiscal Year, but the months of Aug. and Sept. had an increase of 1-2 addition injuries per month, returning the FH Team rate to the baseline of 1.5. This stablization of the FH Team rate is the result of a significant increase in Recordable injuries on one project.

Increased focus on workplace safety and project safety improvement plans is ongoing. The FH OSHA Recordable Case Rate for the month of November was 0.63, the best reported rate in two years.

OSHA Days Away from Work Case Rate

Green

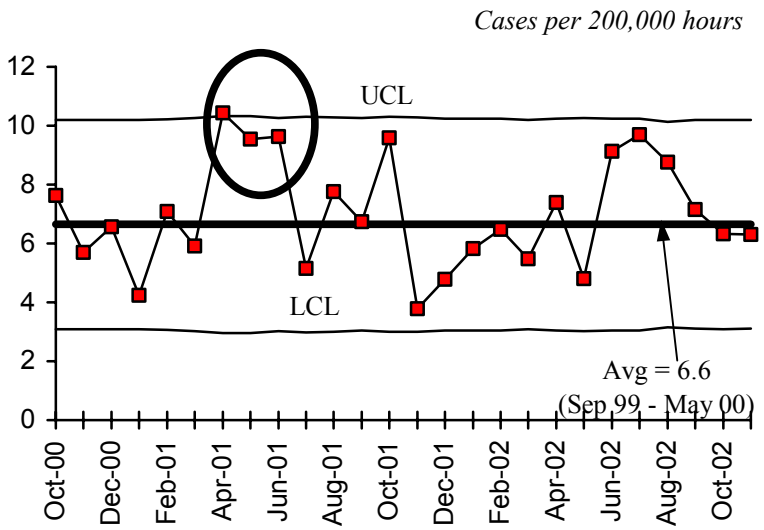


FY 2002 = 0.05
FY 2003 = 0.00
DOE Complex Comparison Average = 0.45 (CY01)

The current Safe Work Hour Count for the FH Team is 5.2 Million.

First Aid Case Rate

Green

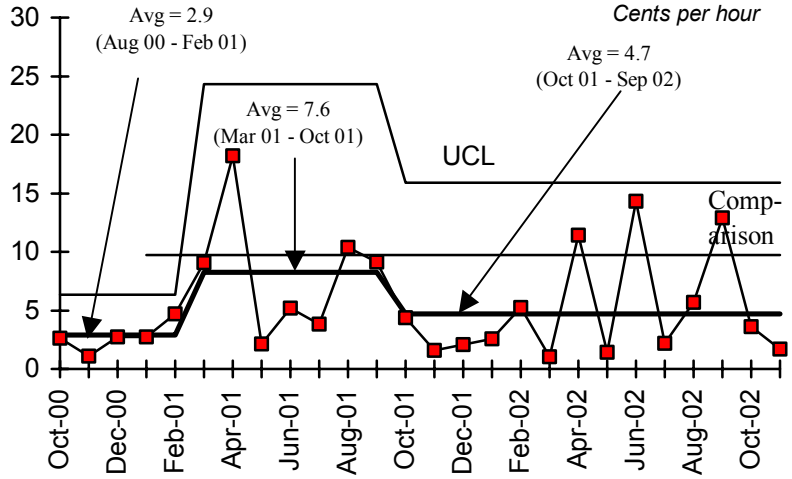


First Aid Rate undergoes seasonal cycles. Increases occur in warmer weather due to insect and animal encounters, and due to wind related minor injuries. Such an increase occurred for June and July 2002. Hanford is especially susceptible to wind borne debris injuries due to the site wildfire in June 2000. First Aid case rate has remained relatively predictable.

Fiscal year calculations are not included as DOE does not publish a comparison rate, and comparisons of partial fiscal year data to prior years would not be appropriate due to the routine cyclical trends in the data.

DOE Safety Cost Index

Green



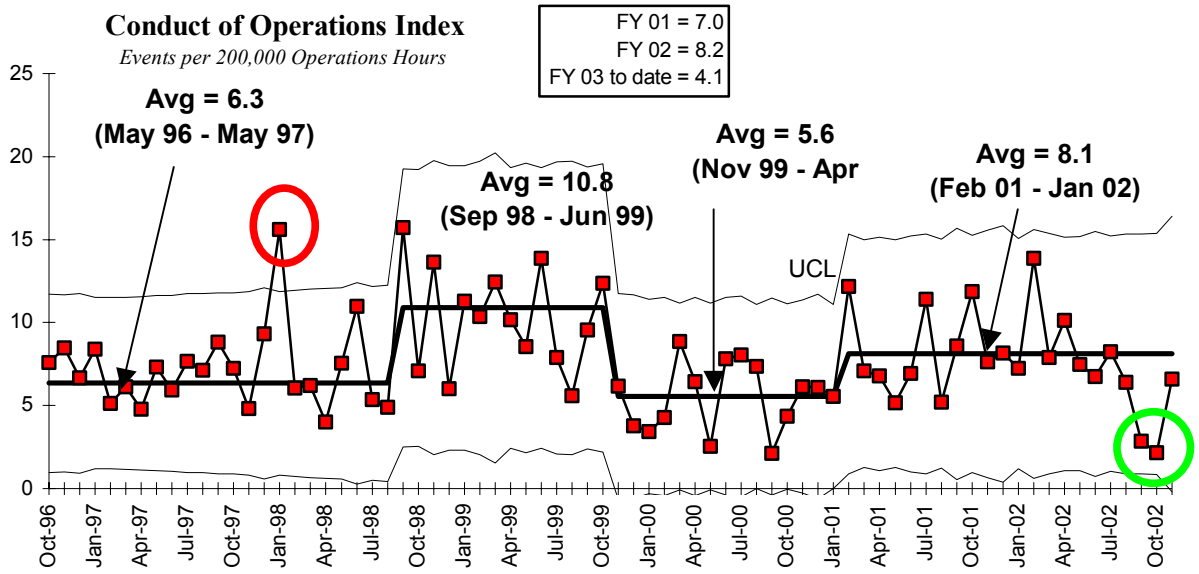
FY 2002 = 5.4
FY 2003 = 2.6
DOE Complex Comparison = 9.71
The current baseline was adjusted due to growth in the number of days on cases within the baseline. Current baseline is 4.7 cents per hour, still less than the DOE CY 2001 rate of 9.7. FH has reviewed past Restricted Work cases that are still incurring restricted time, and have referred several for medical reevaluation.

Overall the severity of the injuries being experienced on the projects is low.

CONDUCT OF OPERATIONS

September and October are two standard deviations below average, a significant decrease.

The current month tends to be artificially low as it can take up to 45 days to assign a root cause to an occurrence report and the majority of the event types in the index are root cause generated.



BREAKTHROUGHS / OPPORTUNITIES FOR IMPROVEMENT

Breakthroughs

Monolithic Removal of 327 Hot Cells — Intact removal of the 327 hot cells appears to be a technically feasible approach to accelerated 300 Area closure and to have potentially significant ALARA and schedule/cost benefits. Certification that the hot cells can be disposed of as non-Transuranic (TRU) waste is key to adopting monolithic removal as the technical baseline. The Central Plateau Remediation Project (CP) was successful in obtaining Accelerated Site Technology Deployment (ASTD) funding to purchase in-situ characterization instruments that will lead to the eventual low-level waste certification. Deployment of three of the four instruments (Copper Foil Activation, Neutron Detection Instrument Pod and the Cartogram Gamma Camera) in the 327 G and H hot cells is complete. The contamination in both cells is relatively uniformly distributed and is significantly less than the amount that would necessitate disposal as TRU.

Nondestructive Examination (NDE) of Contamination in the KE Basin Walls and Floors — A significant activity necessary to deactivate the 100 Area KE Basin is to characterize the level of contamination in the basin's unsealed concrete walls and floor. This characterization data will be used as part of the technical basis to determine the methods to be applied in completing the deactivation of the basin, once the fuel and sludge have been removed.

The SNF Project will be using nondestructive (gamma scanning) techniques and detector systems, developed by the Pacific Northwest National Laboratory, to acquire data on the depth of radionuclide penetration in the basin's concrete walls and floors. This is the first time the NDE technique will be used to obtain characterization data with the facility in normal operation, with its full inventory of fuel, sludge and contaminated water. If successful, the data will be used, in conjunction with other information, to determine which deactivation methods can realistically be used to remove/reduce the radiological

dose/contamination, as well as to determine which basin areas are in the greatest need of mitigation. After initial deployment in the KE Basin, the wall detector system received basin water contamination, which must be resolved before data gathering can resume. Recovery efforts have been post-poned to December 2002 due to other KE Basin priority work.

Stabilization of Nuclear Material — Gamma assay equipment has been ordered to support nondestructive assay (NDA) examination of the high chloride oxide material. The NDA examinations will be used to determine which items will require washing.

Opportunities for Improvement

Fuel Transfer System (FTS) — The SNF Project brought the FTS online November 25, 2002 and made three cask shipments as of November 30, 2002. The challenge is to attain a production level of ten cask shipments per week.

Residues Stabilization — An additional 40 potential items from the PFP Analytical Laboratory that appear to be related to SS&C were identified and evaluated. It was determined that the items were covered under the scope of the SS&C campaign and the associated Data Quality Objective document. Processing of the items will be initiated.

Information Resource Management — The first wireless Personal Digital Assistant (PDA) application to automate the field walkdown process is being tested. It combines the pocket personal computer and Microsoft ActiveSync software with mobile access to the Automated Job Hazard Analysis (AJHA) database.

ISSUES

Processing oxide items via direct thermal stabilization is not feasible — Oxide items with high levels of chloride salts are currently identified in the baseline as being processed direct thermal stabilization. Recent testing by PNNL indicates that the approach isn't feasible. A follow-up study recommended washing the chloride salts in the existing solutions precipitation equipment to remove the salts. Laboratory testing of high chloride oxides continues and alternate washing methods are being explored. Comments received during the design criteria document review are being incorporated. Detailed design of the conductivity instrumentation, decant system, and filtrate recycle line are in progress. See Section I for details.

Sludge Water System (SWS) Schedule Delays — Due date to begin sludge removal for TPA milestone M-34-08 is December 31, 2002; forecast for completion of the TPA milestone is by May 28, 2003. The Project target for completion is March 24, 2003. As of November 30, 2002, the first Sludge Transportation System (STS) has been received. Preliminary system dry runs and testing have been performed at T-Plant. Delivery of the second system is scheduled for January 7, 2003. Installation of basin systems continues and acceptance for beneficial use is forecast by January 8, 2003.

Shippingport Fuel Movement Delayed — T Plant has completed 6 of a planned 18 shipments to the Canister Storage Building (CSB). Corrective actions include the coordination and scheduling of future fuel transfer activities with SNF. The seventh fuel move is scheduled for shipment to CSB on December 13, 2002. The facility will shift to sludge readiness as the priority after fuel shipment 7, with construction activities to support sludge (including three weeks of canyon crane "down time") December 16, 2002 – January 24, 2003. Shipment 8 will be scheduled in late January or in February 2003, dependent on sludge readiness status. Additionally, fuel activities are to be continued before June 10, 2003 to avoid additional readiness activities.

EM Corporate Performance Measures

This information is provided quarterly.

EM Life Cycle Performance Measures

This information is provided quarterly.

Upcoming Planned Key Events

The following key events are extracted from the authorized baseline and are currently expected to be accomplished during the next several months. Most are Enforceable Agreement (EA), DNFSB or DOE-HQ Milestones.

300 Area Remediation

Contract Transition — Support transfer of FH scope to River Corridor Closure Contract (RCCC). Received a modification that changed the date from July 1, 2002, to "at direction of the Contracting Officer." FH is ready to initiate transition upon direction from RL.

Spent Nuclear Fuel

Fuel Removal — Complete removal of 957 MTHM by December 31, 2002 (M-34-18A)

Sludge Water System (SWS) — Install all basin systems, which includes mechanical, electrical, crane, and Closed Circuit Television (CCTV) in December 2002.

SWS — Receive second Sludge Transportation System (STS) in January 2003

MCO Welding — Begin welding of MCOs at CSB in February 2003.

Fuel Retrieval System (FRS) — Complete construction activities for KW Basins SNF scrap removal system in February 2003.

SWS — Contractor and DOE Operational Readiness Reviews (ORRs) in February/March 2003.

Fuel Removal — Complete removal of 1252 MTHM by May 31, 2002 (Target Milestone M-34-27-T01).

200 Area Remediation

Waste Sites — Submit one 200 NPL RI/FS Work Plan for the 200-IS-1 tanks/liners/pits/diversion boxes Operable Unit by December 31, 2002.

Install two additional wells at SST Waste Management Area TX-TY by December 31, 2002

233-S/SA Facilities — Decontaminate and Decommission the 233-S and 233-SA Facilities by June 30, 2004.

200 Area Materials & Waste Management

Accelerate Readiness to Receive SNF K Basin Sludge — 1) Complete movement of Shippingport (PA) fuel, 2) Support activities to receive and store K Basin sludge, and 3) Accelerate T Plant Canyon cell cleanout

MLLW Treatment — Continue shipping waste to ATG under the FY 2003 contract option at an average rate of two shipments per week. Initiate radioactive lead solids shipments to ATG for treatment. Establish a task-order contract with Perma-Fix under the Broad Spectrum Contract program. Subject task-order will cover the thermal desorption technology demonstration activity. Continue to interface with Bechtel Hanford, Inc. (BHI), RL, EPA and Ecology on comment resolution for the 183-H EE/CA

TRU Waste Shipments — Complete EPA and DOE Carlsbad WIPP certification process for Plutonium Finishing Plant calorimeters

TRU Waste Retrieval — Continue preparations for the TRU Retrieval mockup. Conduct trial excavations at the Simulation Test Site in December using the draft procedure. Receive bids on the Assay Support Contract in December. The Drum Venting Performance Specification and Statement of Work are in the approval cycle. Uncertainty on which drum venting contractor will be selected is impacting Documented Safety Analysis (DSA) completion. Issue bid package in January 2003

Plutonium Finishing Plant Support — Continue to support residues processing with shipment of the new Sand, Slag and Crucible waste stream through FY 2003.

300 Area Cleanup Support — Complete support to the 324 Fuels Removal Project and continue support to 327 facilities.

Waste Encapsulation and Storage Facility (WESF) Operations — Complete annual inner capsule movement test. Replace the Continuous Air Monitor (CAM) vacuum pump. Complete K-3 duct modification.

Liquid Waste Processing — Continue wastewater processing through the 200 Area ETF, the 300 Area TEDF, and complete the first 242-A Evaporator campaign in FY 2003.

Plutonium Finishing Plant

Nothing significant to report.